

ELK

Notice of Allowability	Application No.	Applicant(s)	
	09/904,103	FANT ET AL.	
	Examiner	Art Unit	
	Leo Boutsikaris	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AF amendment filed on 5/2/05.
2. ☒ The allowed claim(s) is/are 1-6,8,10 and 20-23.
3. ☒ The drawings filed on 11 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael Lee (Reg. No. 31,846) on 5/13/2005.

The application has been amended as follows:

IN THE CLAIMS

Claims 24-26 are cancelled.

The following is an examiner's statement of reasons for allowance:

Claims 1-6, 8, 10, 20-23 are allowable over the prior art of record for at least the reason that even though the prior art discloses optical switching systems comprising a working central switch and a protection central switch, wherein the protection central switch is used to align the optical system of the working switch, the prior art fails to teach or reasonably suggest, regarding claims 1-5, 8, 10, 20-22, an optical switching apparatus, wherein the controller determines if one of the plurality of central optical switches is malfunctioning, by simultaneously using input signals, which are not generated by the test light sources, to test the active optical switch and the test light sources to test the protection optical switch, and regarding claims 6, 23, an optical

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switching apparatus, wherein the controller determines if one of the plurality of central optical switches is malfunctioning by testing a first plurality of optical paths using the test light sources and by simultaneously testing a second plurality of optical paths using input signals, which are not generated by the test light sources, as set forth by the claimed combination.

Qian (US 2005/0058392, Fig. 3B) discloses an optical switching system, wherein, before the establishment of real data communication, the proper alignment of the optical components of the working switch is verified via a test laser and a test detector. Once, acceptable alignment is verified, the working switch is connected to the real data path, while a protection switch is left as a stand-by ([0038]-[0039]). The system of Qian does not have the capability of testing the functionality of the working switch during operation since it lacks proper input and output signal detectors. Graves (US 2002/0064336, Fig. 6) discloses a typical optical switching system, wherein a test source is used to verify the nature of a fault of an active switch, after a failure has occurred ([0041]).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Leo Boutsikaris whose telephone number is 571-272-2308.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo Boutsikaris, Ph.D., J.D.
Primary Patent Examiner, AU 2872
May 14, 2005



LEONIDAS BOUTSIKARIS
PRIMARY EXAMINER